

CLAIMS

What is claimed is:

1. A tubing cutter to snap onto and circumferentially grasp plastic tubing to facilitate the rotational cutting of the tubing, the cutter comprising:

a cutter body having a front piece removably securable to a back piece such that securement of the front piece and back piece form the body;

a C-shaped grasping portion formed in the body, wherein the C-shaped grasping portion receives the plastic tubing with snap engagement and securely retains the plastic tubing during the cutting of the tubing; and

a fixed blade removably secured between the front and back pieces of the body such that an exposed portion of the blade extends into the grasping portion whereby rotational movement of the engaged cutter around the outer surface of the tubing facilitates cutting.

2. The tubing cutter of claim 1, further comprising a gripping portion on the sides of the body to facilitate gripping for engagement and rotational movement of the cutter.
3. The tubing cutter of claim 1, wherein the inner diameter of the C-shaped grasping portion is smaller than the outer diameter of the tubing.

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4. The C-shaped tubing cutter of claim 1, wherein the rotational movement causes the exposed portion of the fixed blade to cut into the tubing a distance short of the total thickness of the tubing.
5. The C-shaped tubing cutter of claim 1, wherein the body of the cutter is made of high density polyethylene.
6. The C-shaped tubing cutter of claim 1, wherein the fixed blade is a single-edged razor blade.
7. The C-shaped tubing cutter of claim 1, wherein the front piece and the back piece are removably secured together with fastening means.
8. The C-shaped tubing cutter of claim 7, wherein the fastening means are screws.
9. The C-shaped tubing cutter of claim 1, wherein the exposed portion of the fixed blade is horizontally centered at the bottom of the c-shaped grasping portion.
10. The C-shaped tubing cutter of claim 1, wherein the body is symmetrical along the axis defining the width and thickness of the body.
11. A C-shaped tubing cutter comprising a fixed blade and a C-shaped grasping portion capable of snap engagement and circumferential grasping of plastic tubing for

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rotational cutting of the tubing, wherein the grasping portion makes substantial surface contact around the circumference of the tubing a distance necessary to forcefully receive the tubing.

12. The tubing cutter of claim 11, wherein the contact around the circumference of the tubing is a distance between 51 to 75 percent of the circumference of the tubing.

13. A C-shaped tubing cutter for cutting plastic tubing, comprising a fixed blade and a C-shaped grasping portion having an engagement opening with an opening distance smaller than the diameter of the plastic tubing, the insertion of the plastic tubing into the engagement opening of the tubing grasping portion causing snap engagement and circumferential grasping of the plastic tubing within the grasping portion.

14. A method of cutting plastic tubing used in a dual containment tubing system with a C-shaped tubing cutter, comprising the steps of:

aligning the plastic tubing with an engagement opening of the C-shaped cutter;

forcibly engaging the plastic tubing with the opening such that snap engagement is achieved and the plastic tubing is circumferentially grasped by the cutter, with force of complete engagement causing a fixed blade to partially penetrate the outer surface of the tubing;

rotating the cutter around the tubing such that a cutting action is performed along the circumference of the tubing, the cutting action cutting a penetration distance short of the total thickness of the tubing to create a score line;

forcibly disengaging the tubing from the cutter; and
breaking the tubing into two separate pieces along the score line.

15. A C-shaped tubing cutter to snap onto and circumferentially grasp plastic tubing to facilitate the rotational cutting of the tubing, the cutter comprising:

a cutter body having a front piece removably securable to a back piece such that securement of the front piece and back piece form the body;

a C-shaped grasping portion formed in the body, wherein the C-shaped grasping portion receives the plastic tubing with snap engagement and securely retains the plastic tubing during the cutting of the tubing;

a gripping portion formed in the body by at least one arcuate depression for human handling of the cutter; and

a fixed blade removably secured between the front and back pieces of the body such that an exposed portion of the blade extends into the grasping portion whereby rotational movement of the engaged cutter around the outer surface of the tubing facilitates cutting.

16. A tubing cutter for cutting tubing of a specified diameter, a specified wall thickness and having the cutter comprising:

a body comprising a pair of body pieces each having a face, the body pieces attachable to each other at the faces, at least one of the faces of the body pieces having a recess;

a cutter blade sandwiched between the two body pieces in said recess;

the body having a fixed and integral C-shaped grasping portion configured for extending more than half way around the circumferential surface of the tubing of the specified diameter;

the C-shaped portion defining a tubing receiving region, the cutter blade positioned to extend into the tubing receiving region a distance less than the specified wall thickness of the tubing.

17. The tubing cutter of claim 16 further comprising cooperating protrusions and recesses for aligning the body pieces together.

18. The tubing cutter of claim 16 wherein the cutter blade is a single edged razor blade having a flange.

19. The tubing cutter of claim 16 wherein the C-shaped grasping portion has an inner facing circumferential surface with a diameter less than the diameter of the tubing.

20. A combination tubing cutter and dual containment tubing comprising an outer tubing of a specified diameter, a specified wall thickness, the tubing cutter for cutting tubing only, the cutter comprising:

a body comprising a pair of body pieces each having a face, the body

pieces attachable to each other at the faces, at least one of the faces of the body pieces having a recess;

a cutter blade sandwiched between the two body pieces in said recess;

the body having a fixed and integral C-shaped grasping portion configured for extending more than half way around the circumferential surface of the tubing of the specified diameter;

the C-shaped portion defining a tubing receiving region, the cutter blade positioned to extend into the tubing receiving region a distance less than the specified wall thickness of the tubing.

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